

DOCUMENTED PICTURES
of
STRUCTURAL DAMAGE CAUSED BY HURRICANE CELIA
August 3, 1970
in
Corpus Christi and Surrounding Area
Picture Series 8-01 through 8-119

This is Sunday morning, August 9. We are beginning our investigation at the Woolco Discount House in Parkdale Plaza in Corpus Christi. Parkdale Plaza is on South Staples Street at Carmel Drive. Woolco Department Store faces almost due east. The front wall is tilt-up construction. For the Corpus Christi damage, we are using a number series 8, starting with 01.

PHOTO NO.	DESCRIPTION
8-001	An overall view of the east front of the Woolco Department Store.
8-02	Illustrates how the tilt-up wall fell eastward into the parking area. Notice, in the distance, below the flag, how the tilt-up wall extends above the roof level.
8-03	Illustrates brick facing on the tilt-up wall and the lack of connection between the brick and the wall itself.
8-04	A close-up of the southeast corner of the Woolco building. Notice the lack of connection between the south wall and east wall.
8-05	Illustrates the connection between the roof truss near the top of the tilt-up wall. "Up" (for the wall's original position) is to the right. Notice that the number 4 bar in the lower hole has been bent outward. Note also the failure of the concrete surrounding this detail and that the upper hole apparently had no anchor bar.
8-06	This picture is looking south at the southeast corner of the building showing the wall's height and trusses framing into the wall near the top. Notice again, the vertical cantilevering wall above the roof level.
8-07	Shows some major damage to super structure of a Woolco employee.
8-08	A close-up of the last panel to the south. This panel didn't fall. Note the total lack of transverse connections from the failed panel in the foreground to the still standing panel in the background. Picture taken looking south.

- 8-09 Looking north along the fallen wall. Notice that the wall didn't fail at its anchorage, but rather broke for most of its length about 1' to 18' above grade.
- 8-10 This picture shows the vertical reinforcing in the wall. Two rebars (no. 3) approximately 1' apart in the foreground and no more bars for 2-3'.
- 8-11
- 8-12 Notice in picture 812 (there is no 811) the "necking" of the rebar.
- 8-13 Illustrates a column which framed a window and how it pulled away at its base as the wall went to the east.
- 8-14 Shows two columns which frame a window and were connected to the tilt-up wall, and how they went with the wall.
- 8-15 Shows steel detail inside column above window, where apparently the panel had been set after half the column had been cast in place.
- 8-16 Is looking directly westward towards the entrance. The wide flange beam in the center of the picture supported a tall sign. The beam has been cut to remove the sign which extended toward the camera.
- 8-17 Is similar to 816 but the camera has moved back to illustrate where the top of the wide flange that has been cut struck the pavement. This illustrates how much structure extended above the tilt-up; the fallen tilt-up wall can be seen in the background.
- 8-18 Shows a wide flange beam which spanned from the column in the foreground to the next column to the south which failed.
- 8-19 Shows the top of column detail indicating how the wide flange to the left failed as the adjacent column to the south went down.
- 8-20 Is the column to the south of the one that failed, discussed in previous photograph. Note web splice which was the point of failure about 6' from the column at left.
- 8-21 Shows tilt-up slab which was over entrance way which was recessed from wall line. This is bottom of tilt-up which ran over doorways and windows which formed entrance area.
- 8-22 Shows column line to south of one column which failed. Roof system to left was resting on tilt-up wall which failed to the east.

- 8-23 Look north showing edge of tilt-up wall and joist to wall connection. Notice about 5' of wall above roof level and corrugated metal and wood roofing detail.
- 8-24 Is a general view of brick facing. (Air compressor noise in background is workmen knocking off work at 5 minutes till 12). View of east wall showing how brick facing fell from wall due to lack of substantial connection between facing and tilt-up wall.
- 8-25 Begins a series at Charlie Thomas Ford on South Staples, a block from Padre Island Drive. This building faces generally east, lets say east/southeast, and we are standing on the north side. Notice the rigid frame construction with a light end frame. The end frame failed inward. The roof between the end frame and first rigid frame went up. Note travelling monorial frame rail which supported third column from left that prevent north side of building from moving to the east.
- 8-26 Shows first rigid frame to east of end panel with very slight distortion to east. Roof sections on the east side of this frame failed upward probably because west wind, after end panel failed, filled building with wind.
- 8-27 Is a general view of the interior of the Ford Building, showing rigid frame construction with perhaps a 100' span. This building is oriented east-west and must have had hurricane winds blowing through the building. This is evidenced by failure in far curtain wall which was dinder block construction. There is evidence of up-lift, but it may well have been winds blowing through building's long axis, rather than uplift by winds blowing transverse to long axis.
- 8-28 Shows buckles in bottom flanges of purlin as well as buckling at connection at frame.
- 8-29 Is a view looking west along axis of Ford building. There was a cinder block wall along the west side which failed inward. The debris has been removed. There are 6 rigid frames making this a 7 panel building approximately 100' wide by 200' long.
- 8-30 Is a similar bay of the preengineered type to south of longer frame just documented. Here, again, the end panel frame was light and exhibits complete failure. The first rigid frame (25' from end of building) is severely damaged. Note roof sections folded double in "S" shape between first rigid frame and second rigid frame.
- 8-31 Is another view of the west side of the Ford Company Building. Showing damage to first rigid frame and com-

plete destruction of end frame.

- 8-32 Shows how very light column on end frame pulled completely away from anchorage which was only two 1/2" bolts. Case being made here is against light end frames. Bolts on right snapped completely off. This column is at southwest corner of south bay of Ford Company Building.
- 8-33 Skip
- 8-34 Shows first frame from west end of south bay. Note 3 connections: at right the ridge connection, in the center a connection, and a connection at top of column on left.
- 8-35 Shows second rigid frame which is vertically undistorted. Note how roof buckled in characteristic S shape as first rigid frame fell to the east.
- 8-36 Shows how purlins between first rigid frame and second rigid frame buckle into S shape as first rigid frame fell eastward. Screws which anchored sheet metal to purlins stayed in place.
- 8-37 Shows rigid frame 2. Note moment connection at ridge line (off picture to left) and shallower section to right halfway to column.
- 8-38 Shows purlin with buckled bottom flange in roof between second and third rigid frame from west. The bolts between purlins and end frame stayed in place. The roofing pulled away from bolts. These are 1/2" bolts with a purlin spacing of 5'.
- 8-39 Is base of first rigid frame showing how anchorage functional as frame fell to east. The anchor bolts are one-inch in diameter.
- 8-40 Is the beam in end frame showing bolts still in place after corrugated metal roof went skyward.
- 8-41 Looking north from inside of Ford Company Building. Notice light poles in parking lot leaning to right showing direction of wind that acted on building. Doors along north side were closed and suffered only window damage, except for two doors on left.
- 8-42 Shows difference in purlin design between first panel and second panel in north bay.
- 8-43 Is taken at the corner of Kostoriz Road, 4100 block, at Brawner Parkway. Brawner Parkway runs N-S. Pictures is of Parkway Baptist Church which faces Brawner Parkway with

its front facing east. Picture is of folded plate construction canopy which formed entrance to church. Picture looking west.

- 8-44 Is looking south. Apparently folded plate canopies were supported by brick columns and/or brick wall which was unreinforced.
- 8-45 Shows base of reinforced masonry column which supported folded plate roof. Folded plate roof apparently rested on two angle shaped columns. The one in the foreground failed at its base and the one in the background failed near the top. Note however, a relatively large amount of reinforcing steel. Eight, what appear to be No. 4, bars in each column.
- 8-46 Looking generally north showing folded plate canopy about 40' from original position at corner of church. Note supporting structure completely fractured, yet folded plate component is essentially intact. The significant fact noted here is that this damage is on the east side of the building with the predominate wind forces being from the west.
- 8-47 Shows an A frame structure oriented north-south which is next door to the church. This is a funeral home on Kostoriz Road, Clifford Jones Funeral Home. We have noted several A-frame structures that are very high and narrow that seem to stand very well when oriented north-south to the westerly wind. Picture taken looking northwest at the east elevation of the building.
- 8-48 Is a food store on Carol Lane, one block west of Brawner Parkway. Picture taken looking south, or southeast, illustrating how westerly and north-westerly wind got under canopy and lift 1 X 6 rafter roof from laminated beams. These beams and columns were vertically undamaged when roof went skyward.
- 8-49 Is another A-frame. A "What-A-Burger" Stand on Golihar Road, one half block south of Kostoriz. This A-frame has a long axis oriented east-west and received no discernable damage. There was some damage to the shed out front with corrugated metal roofing pulling loose from purlins of shed. This type of damage is typical of light commercial installations in Corpus Christi.
- 8-50 Another drive-in grocery, Circle-K, of exactly the same design as the picture 8-48. This store faces south and was not subjected to the northwest and west winds which uplifted the roof on the exact same design. This store is on Kostoriz Road, 1 block west of Padre Island

Drive. Note, Evans Electric Company to right.

- 8-51 Evans Electric Company. A wood frame garage next door to Circle-K Market. Notice complete destruction.
- 8-52 A picture of the roof trusses that were on the Evans Electric Company. Relatively heavy trusses, but no evidence of significant ties to the walls. Again, in this structure, the end panels did not have trusses that were typical of the interior bents.
- 8-53 In 3600 block of Padre Island Drive showing a drive-in type restaurant which was oriented east-west. This building is A-frame construction. The west end caught the force of the blow and it sustained significant damage. Note that rafters are 2 X 4 and that this structure is apparently of less substantial construction than A-frames in other pictures.
- 8-54 Is another Circle-K Grocery. This one facing due west catching the westerly wind headon. Note in this structure, the complete removal of the roof with the beams and columns remaining intact. This structure is directly across Padre Island Drive. Picture taken looking due east.
- 8-55 (First 5 is missing) A close-up of the Circle-K Grocery. These do appear to be laminated wood beams. These columns were set in concrete and anchored bolted to the wood beams. The basic structure was capable of carrying the uplift but the roof detail was not.
- 8-56 Apartment houses on Padre Island Drive, 3500 block east side. Picture shows typical damage to 2-story apartment construction which lost roof and facing brick. Notice apparent lack of tie between brick facing and interior wall. This building faces west, picture taken looking southeast.
- 8-57 Datsun Dealer, east side of Padre Island Drive facing west.
- 8-58 Is same building, looking at the west elevation. The roof system is gone, the purlins remain. Apparently, some insulation material had been blown onto the interior of the roof as it would be exposed to the building interior. The frames are supported in the middle by a light column. There appears to be no permanent deformation in the structure itself. The front wall on the west side was apparently glass and the roof is corrugated sheet metal.
- 8-59 Is close-up of roof system in Datsun Building. There is some evidence of buckled lower flanges of purlins. How-

ever, corrugated roof seems to have departed without loading purlins significantly. Details are difficult to see because of blown-on insulation material. This building looks like perhaps a 150' rigid frame, however, there are column supports along ridge line. It is of the pre-engineered type with splices at tops of column and on either side of center support. The Datsun Company is in the 3800 or 3900 block of South Padre Island Drive.

- 8-60 Is Thurman Foundering Glass Company, 4233 South Padre Island Drive facing east on west side of South Padre Island Drive. This is a metallic building oriented east-west. Superficially there is no damage to the basic structure.
- 8-61 Shows west elevation of metallic building. Portion on right is an addition which suffered some deformation to south wall. Wall of main structure runs east-west, and we are looking at the west elevation. Shows no sign of damage. Inspection of the inside of the main structure shows no tendency for uplift nor any deformation in walls. Apparently only damaged suffered was to small addition in right of picture 61, although there is a skylight blown out in this addition.
- 8-62 McBride's Garage, 4333 South Padre Island Drive, a brand name metallic building facing east. Picture is taken of northwest corner. Owner reports door was closed at time blow started but the doors on the opposite side were open. He attributes non-failure of structure to leeward doors being open when windward door failed. Examination inside shows no sign of damage to roof, purlins, or frame.
- 8-63 Is McLains Body Shop on South Padre Island Drive, about 1 block north of Evenhardt Road. This preengineered building is on east side of Padre Island Drive facing west. The office area in the front completely un-roofed. Frames from third rigid frame back are apparently undamaged. The second rigid frame clearly shows twisting distortion.
- 8-64 Is third rigid frame back showing buckles in purlins. Roof and panels to right are completely gone, as shown in 8-65.
- 8-65 Looks west southwest from interior of McLain Body Shop. This is also a metallic building, but the doors along the north side are no longer in evidence. No owner on premises, but Bob and I speculate that doors failed allowing interior of building to balloon. East wall is gone and no evidence as to what it was. They have cleaned up since Monday. Anchor bolts suggest that it was typical corrugated metal metallic building wall. The end frame

on the east wall is a rigid frame so apparently the one on the west end was also a frame that has been removed.

8-66

Office area of McLain Body Shop. Rigid frame at left is 2nd from building end. End of building at right had an identical frame connected to a canopy. McLain Body Shop owner caught us as we were leaving explaining that front office area had a canopy which extended in front of the first frame, which was even with the building front. The canopy also extended to the north. Conjecture is that the wind got under this canopy, peeled back the roof passed the second frame and into the third panel. The pattern developing here is one in which exposures to the north and/or west with a possibility for wind getting under or in a structure through a door or window tended to balloon buildings that did not have a path for wind to escape. The McBride Body Shop, for example, had a door open to the windward side, but also the leeward side, therefore, the wind was able to pass through and the building did not balloon.

8-67

Is another metal building east of McLain Body Shop. This building does not have doors on the north or west fronts and apparently suffered no damage. The building is locked preventing inspection on inside. This building looks very similar to McLain Body Shop, but brand name shows "Diamond" as the building name.

8-68

Palm Crest Baptist Church, one block west of Padre Island Drive, almost to Flower Bluff. Long axis of building runs east-west. Picture taken looking north. Panel on west end had small stain glass in form of cross. This was not damaged. Frame structure apparently withstood the wind very well, except for roof damage. We traveled south to Flower Bluff. There is no major structure reflecting damage in this area. The Flower Bluff area is largely "shady" construction. There are many trailer houses turned over and considerable damage to wood frame and cinder block houses and businesses. There are only one or two preengineered buildings visible from Padre Island Drive and these appear to have weathered the storm in good shape. Even though area is less densely populated, the amount of damage seems to be less than in Corpus Christi proper. Flower Bluff is adjacent to Naval Air Station which had reported 140 M.P.H. winds. We turned causeway to Padre Island and travelled back down Padre Island Drive to Alameda cut-off. Travelling east to Alameda Street.

8-69

Sanctuary of Covenant Presbyterian Church on South Alameda Street. This wood frame sanctuary was com-

pletely demolished. The sanctuary was the first structure in the complex and was built some 10 years ago. The congregation prided itself in having built the structure from natural wood. The buildings in the background were built later but followed the same architectural scheme. This church is in 5200 block South Alameda.

- 8-70 Is typical of residential damage in Corpus Christi. House shown is on Drexel Drive, 1 block west of South Alameda, 702 Drexel. Many houses received this level of damage. Not total destruction, but roof damage and resulting water damage to interior.
- 8-71 Is the South Shore Christian Church on South Alameda, one block north of Airline Road. The church faces west. The sanctuary had a large plate glass window on the west elevation. This is a good example of an open end resulting in a failure allowing the wind to get inside and balloon the structure upward. The roof was tongue and groove planking on the timber covered steel frame. Almost all of the roof is gone, although the basic structure is intact. This view is looking east.
- 8-72 Is a view of the South Shore Christian Church looking southeast. Note beams on wing to left are actually steel wide flanges with a wood covering. The ridge beam was not continuous. Apparently wind entered from the west, filled the whole sanctuary area, and blew the roof off on all sides.
- 8-73 Shows wood encased wide flange beams which rest on top of wall.
- 8-74 Damage in this picture reflects steel beam to steel column detail inside of walls. This structure was not of load bearing design.
- 8-75 Shows apartment house on Airline and Alameda. View is looking south at north elevation of apartment building. Shingles were placed on 1 X 4 or 1 X 6 sheathing which looks to be spaced about 3-4" apart. Shows apartment house on South Alameda at Airline Road. This damage is typical of two story construction. The damage appears minor in that only shingles are blown off the roof. However, the rainfall that accompanied the wind almost totally destroyed everything in the interior. The wet, rock wool insulation is a natural for the development of mold. The odor in these apartments is musty and the sheet rock has begun to mold. In many ways, this damage is worse than total destruction in that you have to try to make some order from what is left rather than push it off the lot and start over.

- 8-76 Is another apartment house facing west on Alameda Street. This is of a design similar to the apartments shown in 8-75. Picture windows and doors to front allowed wind to get inside and lift roof up.
- 8-77 Skip
- 8-78 (On Monday morning, August 10, picture series in downtown Corpus Christi.)
Is a view of the west elevation of the Guaranty Bank Building on the bluff in downtown Corpus Christi. Picture is taken looking due east.
- 8-79 Is a view of the west elevation of the Wilson Tower in downtown Corpus Christi on the bluff. Picture is taken looking southeast.
- 8-80 Is a view of the west face of the Driscoll Hotel in downtown Corpus Christi. Picture taken looking north-east.
- 8-81 Is a view of the south elevation of the Guaranty Building. Picture taken looking north-northwest.
- 8-82 Is a view of the east face of the Guaranty Building one block west of the Driscoll Hotel on the bluff in Corpus Christi.
- 8-83 Is a view of the east face of the Driscoll Hotel. Picture taken looking west.
- 8-84 Is a view of a building on the southeast corner of Peoples Street and North Chapparral. View is of west face. Picture taken looking southeast.
- 8-85 Is view of same building in 8-84. This is view of north side. Picture taken looking southeast.
- 8-86 Is view of west side of Nueces Hotel. Picture looking east-northeast.
- 8-87 Is looking south-southeast at a building in the 400 Block of Chapparral on the east side of the street in the middle of the block.
- 8-88 Is a view of east elevation of Wilson Tower on the bluff. Picture taken looking west.
- 8-89 Is view of north side of Shearaton Motor Inn on Shoreline Drive. Long axis of building is east-west with recessed plate glass doors.
- 8-90 Is south face of Corpus Christi State National Bank Building. Long axis runs east west. Note: minimal damage

to windows on south face but damage to sign on west face.

- 8-91 Is building across Peoples Street from Nueces Hotel. Picture is of south face, looking north-northwest.
- 8-92 Is view of south side of Ramada Inn, taken looking Northeast. At corner of Water and Peoples. Far end facing Shoreline.
- 8-93 North side of Corpus Christi State National Bank, looking southeast.
- 8-94 North side of Ramada Inn, looking southeast.
- 8-95 Looking south down Chapparral Street showing nothing in particular.
- 8-96 Guaranty Building looking southwest. Portion on left is east face.
- 8-97 North face of Driscoll Hotel, looking South. Building on right has recessed windows. There are a few broken panes.
- 8-98 North fac of Guaranty Building on right, taken looking southwest.
- 8-99 Annex to Driscoll Hotel, corner Antelope and North Carancahua.
- 8-100 Skip
- 8-101 North elevation of Wilson Tower.
- 8-102m Is view of Guaranty Building looking southeast. Face on left is north face.
- 8-103 Is view of old building, wood truss construction, corner of Leopand and Carrizo, looking southwest.
- 8-104 Same building looking almost west at northeast corner Leopard and Carrizo. I don't think 8-104 appears in picture.
- 8-105 Is view to right of previous picture. Note buried car.
- 8-106 Is in Taft, Texas. An industrial building on the east side of town, 1/2 block to south of U. S. 181. Picture taken looking southeast.
- 8-107 East side of building. In Taft, wind came from east and southeast. This is about a 100' span rigid frame with center support.

- 8-108 Is interior of frame. Note that they are fabricating trailers. View looking south from north end of building. Is a view of typical purlins showing buckled bottom flange on windward side of building.
- 8-109 *Purlins in portion of roof to north of door described in 8-109 A. Note diamond shaped buckles in lower flanges.*
- 8-109 A Shows purlins buckled upward. However this panel is adjacent to a door. Damage seems to have occurred more extensively adjacent to doors which face the windward side. Wind came from southeast and east. Taken looking southeast.
- 8-110 General view of interior looking north. Damage to right is adjacent to door.
- 8-111 Is a view of ~~north~~ end of building which has an addition which failed, falling to the south. This addition was of shorter span and apparently later construction.
- 8-112 Is a view of the west elevation looking generally South. Large building is butler type.
- 8-113 Is a view of the Catholic Church in Taft. This church is south of the railroad track and U. S. 181 about one block, in Taft proper. This view is looking west. Beams are prestressed concrete, spanning between walls which may have pilasters.
- 8-114 Shows typical beam support. No evidence of other than cinder block column support.
- 8-115 Shows support for east most pre-stressed beam which fell into sanctuary. Portion of column hanging to left indicates some presence of reinforcing steel in pilaster column.
- 8-116 Is looking at south wall. Projection upward at left was column supporting first pre-stressed beam.
- 8-117 Shows roof system in center of sanctuary.
- 8-118 Is general view of Catholic Church looking generally northwest. Local residents report 70 people in sanctuary at time of failure, no injuries. This is the Immaculate Conception Church. It is near 400 block of Davis Road. There is a considerable amount of industry on south side of railroad tracks in Taft. Many large preengineered buildings receiving varying degrees of damage can be seen from highway.
- 8-119 Is at corner North McCall and West Sinton Street on U. S. 181 in downtown Sinton. This is old brick masonry construction, looking southwest. Damage in Sinton seems much less significant than to comparable

structures in Taft. There are many metal type industrial buildings which would offer good study possibilities. (Leaving Sinton, 12:42 p.m., August 10).

- 9-21 Bldg. under const. -- 4th & Moore Street -- Interior view, looking east, showing wall panels of the south wall blown in. Note the 6" pipe supports at the center of each bay. Building is approx. 170 ft. long and 64 ft. wide with a rigid frame every 25'.
- 9-22 Bldg. under const. -- 4th & Moore Street -- Exterior view, looking south, of the west wall. Note that the wall panels are blown out.
- 9-23 Bldg. under const. -- 4th & Moore Street -- Close-up view of typical wall panel base angle of the south wall. Note lack of tie-downs except for an occasional nail which was driven into a construction joint.
- 9-24 Norvell Wilder Oil Field Supply Warehouse -- Buffalo at Palm Drive -- Exterior view, looking north, showing buckled purlins in the third bay from the southwest end. The first two bays apparently collapsed completely and have been cleared away. Long axis of the building lies on a southwest-northeast line.
- 9-25 Norvell Wilder Oil Field Supply Warehouse -- Buffalo at Palm Drive -- exterior view, looking east, of buckled purlins described in picture 9-24.
- 9-26 Grain storage warehouse -- Upriver Road -- Exterior view, looking south, of west end of building. Note the apparent failure of the first interior bent from west end.
- 9-27 Grain storage warehouse -- Upriver Road -- Exterior view looking south. This building is approximately 70' x 300'.
- 9-28 Osage Oil Co. Warehouse -- Upriver Road at Viola Road -- Exterior view, looking east, showing west and north wall. Note buckled purlins on north side of west bay.
- 9-29 Osage Oil Co. Warehouse -- Upriver Road at Viola Road -- Interior view, looking north, of buckled purlins on north side of west end bay. (Note that no number appears in picture.)
- 9-30 Osage Oil Co. Warehouse -- Upriver Road at Viola Road -- Interior view, looking west, of buckled purlins on west end bay. (~~Note Prints need to be made~~)
- 9-31 Osage Oil Co. Warehouse -- Upriver Road at Viola Road -- Interior view, looking west, of north wind column of west end wall.
- 9-32 Osage Oil Co. Warehouse -- Upriver Road at Viola Road -- Interior view, looking southeast, of damage to west door of south side of building. Note beam column connection of interior bent next to door.
- 9-33 No picture.

- 9-34 Osage Oil Co. Warehouse -- Upriver Road at Viola Road -- Exterior view, looking north, of west end wall.
- 9-35 Osage Oil Co. Warehouse -- Upriver Road at Viola Road -- Exterior view, looking northeast, of south wall. This is a 50' x 100' building.
- 9-36 Maintenance Bldg. -- Upriver Road -- Interior view, looking east, of buckled purlins in south bay.
- 9-37 Maintenance Bldg -- Upriver Road -- Interior view, looking east, of buckled purlins in north bay.
- 9-38 Maintenance Bldg. -- Upriver Road -- Exterior view, looking west, of north wall. The wall on the north was bowed out. Two overhead doors in the south wall were blown in and the single overhead door in the north wall was blown out. This building was 50' x 75' with its long axis north-south.
- 9-39 Bentolight Corp. -- Ferguson St. in Rincon Industrial Park -- Building under const. -- View, looking east, of east wind column of the south wall.
- 9-40 Bentolight Corp. -- Ferguson St. in Rincon Industrial Park -- Interior view, looking southwest, of south wall west wind column. Note that the original location of girts indicate that there was not a door in the south wall.
- 9-41 Bentolight Corp. -- Ferguson St. in Rincon Industrial Park -- Interior view, looking north, of north wall. Note that the sheet metal was blown out.
- 9-42 Bentolight Corp. -- Ferguson St. in Rincon Industrial Park -- Exterior view, looking north, of east wind column of south wall.
- 9-43 Bentolight Corp. -- Ferguson St. in Rincon Industrial Park -- Exterior view, looking northwest, of south wall. Note that no evidence existed that would suggest that the damage was done by a missile, i.e. paint was not scratched, no missile was found in the area.
- 9-44 Pawn shop -- Port Avenue at Ruth -- Exterior view, looking north, of south wall.
- 9-45 Pawn shop -- Port Avenue at Ruth -- View, looking east, looking along south wall. Note the cinder block wall was reinforced horizontally at every third layer.
- 9-46 Pawn Shop -- Port Avenue at Ruth -- Exterior view, looking north, showing collapsed roof with cinder block from south wall on top of roof. Apparently the north wall bulged outward pulling the roof free from the south wall before the south wall collapsed. The north wall did not collapse although it had some permanent deformation.

PHOTO No.

NEGATIVE

411

DE

E. exists.

433

DE

DE. doesn't exist

477

DE

481-82

missing

500

DE

520

E

533

DE